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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/050,186	01/18/2002	Chuck C. Xu		7626

7590 05/28/2004  
Chuck Xu  
c/o Dupont Photonics Tech. LLC  
100 Fordham Road  
Wilmington, MA 01887

EXAMINER

BERMAN, SUSAN W

ART UNIT	PAPER NUMBER
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1711

DATE MAILED: 05/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.	Applicant(s)	
10/050,186	XU ET AL.	
Examiner	Art Unit	
Susan W Berman	1711	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(e). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) 14-24 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 4/02.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_.

*Election/Restrictions*

Applicant's election with traverse of Group I, claims 1-13 in Paper received 03-26-2004 is acknowledged. The traversal is on the ground(s) that claims 14-24 relate to uses of the composition of Group I and that a search of Group I would be likely to relate to the Group II claims. This is not found persuasive for the following reasons. The claims of Group II are drawn to a "waveguide device", which is a product obtained from the composition in the claims of Group I by patterning the composition of a substrate. Although the claims set forth a method for obtaining the product the claims are drawn to the product and not to the method and encompass the same product obtained by a different method for making. The search for the composition of Group I does not require or necessarily include a search for waveguide devices, which are a different class of invention. It is noted that the composition as set forth in the claims can be used for providing products other than waveguides, such as films or coatings.

The requirement is still deemed proper and is therefore made FINAL.

Claims 14-20 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the Paper received 03-26-2004.

*Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

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subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-3 and 5-12 are rejected under 35 U.S.C. 102(e) as being anticipated by Blomquist et al (6,496,637, equivalent Application Publication US 2002/0122647 and divisional US 6,711,336).

Blomquist et al disclose compositions comprising fluorinated polymerizable multifunctional (meth)acrylate compounds prepared from the same components as set forth in the instant claims and a photoinitiator. See column 3, line 37 to column 4, line 41, column 7, lines 1-22, and Examples 1-5.

Claims 1-3 and 5-12 are rejected under 35 U.S.C. 102(e) as being anticipated by Blomquist et al (Application Publication US 2003/0108326). Blomquist et al disclose compositions comprising fluorinated polymerizable multifunctional (meth)acrylate compounds prepared from the same components as set forth in the instant claims and a photoinitiator. See paragraphs [0015] to [0018], [0021 to 0025], [00377], [0038], [0059] and Examples 1-5.

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blomquist et al (6,496,637). The disclosure of Blomquist et al is discussed above. With respect to claim 4, Blomquist et al do not mention employing at least 2.5 equivalents of OH groups in the fluorinated polyol for every equivalent of hydroxy-reactive groups in the polycarboxylic acid. However, One of ordinary skill in the art at the time of the invention would have recognized that an excess of hydroxyl groups in the polyol are

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needed to react with the (meth)acrylic acid or (meth)acrylic chloride to provide the acrylate polymerizable groups after reaction with the polycarboxylic acid. With respect to claim 13, Blomquist et al teach combining the monomers with a "suitable photoinitiator" but do not specifically mention employing more than one photoinitiator. However, It would have been obvious to one skilled in the art at the time of the invention to employ one or more than one photoinitiator in the compositions disclosed by Blomquist et al for the following reasons. One of ordinary skill in the art at the time of the invention would have been motivated by a reasonable expectation of successfully providing photoinitiation of the disclosed composition using a mixture of photoinitiators because a mixture of photoinitiators would be expected to function in an equivalent manner to a single photoinitiator or to function in a synergistic manner taking advantage of activation with different wavelengths of light, for example. It is considered to be within the ordinary skill of one skilled in the art at the time of the invention to determine the kinds and amounts of photoinitiator or photoinitiators need to polymerize the disclosed acrylate-functional compositions, in the absence of evidence to the contrary.

### *Conclusion*

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Wang et al (6,689,900) discloses fluorinated crosslinkers for use in fluorinated optical coatings. Xu et al (6,306,563) disclose radiation curable fluorinated compositions comprising multifunctional-fluorinated (meth)acrylates. Moyer et al (5,136,682) disclose fluorinated alcohols reacted with an acrylate to provide fluorinated acrylates. Barraud et al (6,428,893) disclose compositions comprising at least partly fluorinated poly(meth)acrylates mixed with at least two partly fluorinated reactive diluent monomers. The prior art fluorinated (meth)acrylates are not obtained from a fluorinated alcohol reacted with a core molecule having at least two equivalents of hydroxyl-reactive groups. Hale (5,822,489) discloses a

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cladding material comprising perfluoroether backbone end capped with (meth)acrylates groups via urethane groups.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Susan W Berman whose telephone number is 571 272 1067. The examiner can normally be reached on M-F 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on 571 272 1078. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Susan W Berman  
Primary Examiner  
Art Unit 1711

SB  
5/26/04